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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,030	04/26/2001	Thomas Robert Albrecht	TUC920010002US1	6914

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EXAMINER

SNIEZEK, ANDREW L

ART UNIT PAPER NUMBER

2651

DATE MAILED: 03/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/842,030

**Applicant(s)**

ALBRECHT ET AL.

**Examiner**

Andrew L. Snizek

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-41 is/are allowed.
- 6) ☒ Claim(s) 1,3-6,42 and 43 is/are rejected.
- 7) ☒ Claim(s) 2, 7-12 and 44-46 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: _____  |

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## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement filed 4/26/01 has been considered.

### ***Drawings***

2. The drawings filed 4/26/01 are acceptable to the examiner.

### ***Specification***

3. The disclosure is objected to because of the following informalities: Copending application (TUC920000060) as referred to on page 1 of the specification needs to be replaced with a proper U.S. Patent application number.

Appropriate correction is required.

### ***Claim Objections***

4. Claims 4 and 42 are objected to under 37 CFR § 1.75 (a) as not particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention or discovery. Claim 4 sets forth "said transfer station" which was not previously discussed in the claim(s) 4/1. Claim 42 sets forth a portable disk drive cartridge which be interpreted as a cartridge housing a disk used in a disk drive or a cartridge housing a disk drive. For rejections under art, examiner will interpret the disk drive cartridge as a cartridge housing a disk for use with a disk drive. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1,3, 4, 5 and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Leonhardt et al..

Re claim 1: Leonhardt et al. teaches a data storage cartridge of generally an exterior dimensional form factor of a cartridge having a leader block (column 3, lines 49-55) that comprises a data storage device (cassette, disk, memory array, miniaturized drive element) and a cartridge shell (see for example figure 2, element 100) a blocking portion where normally would be a leader block hole which is used to differentiate this cartridge from the standard cartridge (column 4, lines 32-49).

Re claim 3: the blocking portion as taught by Leonhardt et al. is at a side of the cartridge normally used for a threading pin that would engage the cartridge (column 4, lines 42-49).

Re claim 4: the claimed data transfer interface is satisfied by the discussion in column 5, lines 47-68.

Re claim 5: the claimed shock supporting structure is deemed satisfied by the flexible fingers or bands (column 4, lines 24-30) and the use of a flex cable interface is deemed satisfied by the moveable interface as discussed (column 5, lines 65-68).

Re claim 42: (column 5, line 47-column 6, line 24) discusses a transfer station (location) within a library in which a magnetic disk drive cartridge (for example the cartridge of figures 6 or 11) interfaces for the transfer of information.

***Claim Rejections - 35 USC § 103***

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7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 6 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leonhardt et al. in view of Chan.

The teaching of Leonhardt et al. is discussed above and incorporated herein. Claims 6 and 43 additionally sets forth alignment pins in the transfer station to correspond to holes in the cartridge for providing a registration between the transfer interfaces .

Although such feature is not taught by Leonhardt et al., such feature is well known in the art as taught by Chan (column 6, lines 11-18). The registration of transfer interfaces corresponds to the operational position as taught by Chan. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate pins and

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holes as taught by Chan in the arrangement of Leonhardt et al. to insure data transfer between the cartridge and the transfer station can occur.

***Allowable Subject Matter***

10. Claims 2, 7-12 and 44-46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. Claims 13-41 are allowed.

The claimed data storage cartridge as set forth in claim 2/1 that includes a shell blocking portion that is used to indicate when the cartridge is at the end of travel in the receiver and also to indicate the differentiated identification is neither taught by nor an obvious variation of the art of record. Claims 10-12 depend on claim 2. The claimed data transfer cartridge set forth in claim 7/6/4/1 that includes registration holes formed of a material having electrical resistivity which is used to form a discharge path through the material and the pins is neither taught by nor an obvious variation of the art of record. The claimed data storage cartridge as set forth in claim 8/4/1 that includes a power transfer interface as part of the external data transfer interface to transfer power to the data storage device is neither taught by nor an obvious variation of the art of record. Claim 9 depends on claim 8. The claimed transfer station having the specifics as set forth in claim 13 that are used in cooperation with a shell blocking portion to determine when the cartridge is at the end of travel in the receiver and also to indicate the differentiated identification is neither taught by nor an obvious variation of the art of record. Claims 14-21 depend on claim 13. The claimed automated data storage library

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as set forth in claim 22 that includes shelves that store portable data storage cartridges that contain data storage media cartridges and magnetic disk drive cartridges along with a robot accessor that transfers these cartridges amongst storage shelves, at least one data storage drive and at least one transfer station is neither taught by nor an obvious variation of the art or record. Claims 23-28 depend on claim 22. The claimed portable magnetic disk drive cartridge as set forth in claim 29 that includes a external data transfer interface opposite a rear end, a shock mount supporting the disk drive assembly with a flex cable that interconnects the rear end of the disk drive assembly with the data transfer interface such that shock mount and the flex cable mechanically isolate the disk drive assembly from the cartridge shell is neither taught by nor an obvious variation of the art of record. Claims 30-35 depend on claim 29. The claimed portable disk drive cartridge as set forth in claim 36 used in a storage library having shelves that store cartridges made up of portable data media cartridges and magnetic disk drive cartridges, the disk drive cartridge having a shell with a exterior dimension to be gripped by a robot accessor and also having a data transfer interface that is couple to the encased drive assembly to provide data transfer to the storage library is neither taught by nor an obvious variation of the art of record. Claims 37-41 depend on claim 36. The claimed transfer station as set forth in claim 44/43/42 wherein the alignment pins are used to provide an electrostatic discharge path from the holes of the cartridge to ground is neither taught by nor an obvious variation of the art of record. The claimed transfer station as set forth in claim 45/42 that additionally comprises a station power transfer interface and an electrical contact verification detector that operate as set forth

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is neither taught by nor an obvious variation of the art of record. Claim 46 depends on claim 45.

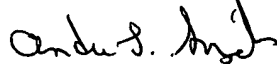
**Conclusion**

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hog et al. teaches an industry standard cartridge with coding marks.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew L. Snizek whose telephone number is 703-308-1602. The examiner can normally be reached on Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 703-305-4700. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Andrew L. Snizek  
Primary Examiner  
Art Unit 2651

A.L.S.  
3/6/04